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Contribution of selected foods to intakes of energy, fat, saturated fat and non-milk extrinsic sugars. By K.L. Barton¹, W.L. Wrieden², J. Armstrong³, A. Sherriff⁴, A.M. Craigie⁵ and A.S. Anderson⁵, ¹*Division of Food and Drink, Abertay University, Dundee DD1 1HG*, ²*Human Nutrition Research Centre, Newcastle University, Newcastle upon Tyne NE2 4HH, UK*, ³*School of Health and Life Sciences, Glasgow Caledonian University, Glasgow G4 0BA*, ⁴*University of Glasgow Dental School, Glasgow G2 3JZ* and ⁵*Centre for Public Health Nutrition Research, University of Dundee, Dundee DD1 9SY*

Evidence based Scottish Dietary Targets (Revised Dietary Goals since 2013) have been monitored since 2001⁽¹⁾. The baseline figures used in the setting of these targets were derived mainly from the National Food Surveys of 1989-1991 and were an indication of food and nutrient intake at that time. As national and global food supplies are constantly evolving, it is important to revisit the contribution of different food categories to energy, fat, saturated fat and non-milk extrinsic sugars (NMES) and ensure that the most important foods and drinks are included in the monitoring of overall population intakes.

Household food purchase data from 2001 to 2012, for Scotland, from the UK Living Costs and Food Survey were analysed to estimate the contribution selected food groupings made to intakes of energy, fat, saturated fat and NMES. Adjustments were made for waste⁽²⁾ and data were analysed using general linear models within the complex samples module of SPSS (SPSS Inc., Chicago, IL, USA) weighting to the Scottish population and taking account of sampling methods. Results are provided for population data (i.e. includes consumers and non-consumers), in descending order by energy contribution. Those contributing more than 5% to total intake of energy or one of the macronutrients are presented in the table.

Food Grouping	Energy ¹		Fat ¹		Saturated Fat ¹		NMES ¹	
	kJ/day	%	g/day	%	g/day	%	g/day	%
Total								
Confectionery and Sweet								
Biscuits	845	9.8	8.91	10.3	4.73	14.0	19.17	23.4
Bread and Rolls	707	8.2	1.55	1.8	0.35	1.0	0.00	0.0
Total Processed								
Red Meat ²	643	7.4	10.66	12.3	4.09	12.1	0.12	0.1
Total Milk	525	6.1	5.56	6.4	3.47	10.3	0.27	0.3
Unspecified meal ³	488	5.6	5.91	6.8	1.86	5.5	0.85	1.0
Total Fruit and Vegetables	426	4.9	0.83	1.0	0.17	0.5	6.03	7.4

Total Spreading								
Fats	402	4.6	10.75	12.4	4.81	14.2	0.00	0.0
Sugar								
Containing Soft								
Drinks	329	3.8	0.00	0.0	0.00	0.0	19.98	24.4
Cakes, Pastries								
and Puddings	264	3.1	2.87	3.3	1.23	3.6	4.75	5.8
Total Cheese	220	2.5	4.38	5.1	2.78	8.2	0.00	0.0
Cooking Oil	207	2.4	5.59	6.4	0.64	1.9	0.00	0.0
Sugar	191	2.2	0.00	0.0	0.00	0.0	11.92	14.6

¹ Amount and % contribution of food grouping to the total intake of nutrient; ²May include starch component e.g. pastry / potato / bread; ³An unspecified meal is one categorised as a 'meal', 'school meal' or 'meal at work' with no further detail given

The majority of foods that contribute most energy, fat, saturated fat and NMES are already monitored⁽¹⁾ however there are several additional foods that may warrant monitoring in the future e.g. spreading fats, cheese and cooking oil. The results highlight that confectionery and sweet biscuits, a category that is often only considered to be a high contributor of NMES is also the largest contributor to energy, 2nd largest contributor to saturated fat and the 3rd largest contributor to fat. These results are similar to those found using Kantar WorldPanel purchase data⁽³⁾. Confectionery and sweet biscuits can only contribute a very small amount to a balanced healthy diet as illustrated by the Eatwell plate. Reducing sugary drinks by two-thirds and halving confectionery and sweet biscuit intake (the top 2 contributors to NMES intake) has the potential to bring population NMES intake below the dietary goal for Scotland⁽⁴⁾ (less than 11% of food energy) and offer a significant reduction in excess energy.

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